

Title (en)  
Rotary hammer

Title (de)  
Bohrhammer

Title (fr)  
Marteau rotatif

Publication  
**EP 1815947 A3 20130306 (EN)**

Application  
**EP 07105981 A 20000414**

Priority  
• EP 00303158 A 20000414  
• GB 9909987 A 19990430

Abstract (en)  
[origin: EP1048415A2] A hammer that is capable of receiving a tool bit (30) for acting on a workpiece, and includes an air cushion hammering mechanism that comprises a cylinder (2), a piston (6) that can be caused to reciprocate within the cylinder, and an impact member (12) that is slidably located within the cylinder and can be caused to move in response to reciprocation of the piston by means of an air cushion between the piston and the impact member so that the impact member can strike the end of a bit (30) that is held in the hammer. The hammer includes a web (22) of flexible impervious material that extends from the impact member to prevent ingress of dust from the region of the bit to the cylinder. A hammer is also provided which includes an arrangement for arresting the impact member in its forward position, which comprises a resilient ring (52) that is located within the cylinder and extends around the impact member, the impact member (12) having an intermediate portion (100) of varying diameter so that, at a given position of the impact member in the cylinder, the intermediate portion (100) of the impact member touches the resilient ring (52) and a substantially closed chamber is formed within the cylinder (2) that extends around the resilient ring (52), further forward movement of the impact member reducing the volume of the chamber (70) and causing the resilient ring (52) to constrict the impact member. A hammer is also provided which includes a housing (1) and a tool holder (4) that can receive a tool bit (30) for acting on a workpiece, in which the bit (30) is retained in the tool holder by means of one or more locking elements (42) and the hammer includes one or more cushioning elements (34, 36) located between the tool holder (4) and the housing (1) so that impacts that are reflected by the workpiece back along the bit (30) are transmitted to the housing via the tool holder (4) and the cushioning element(s) (34, 36). <IMAGE>

IPC 8 full level  
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Citation (search report)  
• [X] FR 2454864 A1 19801121 - DUSS MASCHF [DE]  
• [X] US 5871059 A 19990216 - SHIBATA MITSUYOSHI [JP], et al  
• [XA] DE 2820128 A1 19791122 - BOSCH GMBH ROBERT  
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